(ii) blocking said solid phase;

(iii) fixation of the proteins coated on said solid phase;

(iv) pretreatment of said solid phase.

Sub. D3

38. (new) An immunoassay kit comprising a solid phase carrying as antigen an HCV NS3 protein and a reducing agent.

39. (new) The immunoassay kit according to any of claims 36 to 38 wherein said HCV NS 3 protein is an HCV NS3 amino acid sequence selected from the group consisting of SEQ ID NO:3-18.

C1 cont'd

40. (new) The immunoassay kit according to any of claims 36 to 38 wherein said HCV NS3 protein is contained in a fusion protein.

41. (new) The immunoassay kit according to claim 39 wherein said HCV NS3 protein is contained in a fusion protein.

42. (new) The immunoassay kit according to claim 40 wherein said fusion protein is selected from the group of amino acid sequences consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:32.

43. (new) The immunoassay kit according to claim 41 wherein said fusion protein is selected from the group of amino acid sequences consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:32.

Sub. D4

44. (new) The immunoassay kit according to any of claims 36 to 38 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either

S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

Sub. D

45. (new) The immunoassay kit according to claim 39 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

C1 cont'd

46. (new) The immunoassay kit according to claim 40 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

47. (new) The immunoassay kit according to claim 41 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

48. (new) The immunoassay kit according to claim 42 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids

with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

Sub'd

49. (new) The immunoassay kit according to claim 43 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing either S1200, A1218, A1384, P1407, V1412, P1424, or F1444, or a combination of one of said amino acids with any of the following amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, F1410.

C1 Cont'd

50. (new) The immunoassay kit according to any of claims 36 to 38 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

51. (new) The immunoassay kit according to claim 39 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

52. (new) The immunoassay kit according to claim 40 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

53. (new) The immunoassay kit according to claim 41 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

54. (new) The immunoassay kit according to claim 42 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

55. (new) The immunoassay kit according to claim 43 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

56. (new) The immunoassay kit according to claim 44 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

57. (new) The immunoassay kit according to claim 45 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

C1 cont'd

58. (new) The immunoassay kit according to claim 46 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

59. (new) The immunoassay kit according to claim 47 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

60. (new) The immunoassay kit according to claim 48 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

61. (new) The immunoassay kit according to claim 49 wherein said HCV NS3 protein is an HCV NS 3 protein treated by a method comprising the steps of sulphonation and subsequent desulphonation.

62. (new) The immunoassay kit according to claim 50 wherein said HCV NS3 protein is additionally treated with a zwitter-ionic detergent.

Sub. D5

63. (new) The immunoassay kit according to claim 62 wherein said HCV NS3 protein is treated with Empigen as zwitter-ionic detergent.

64. (new) A method for producing an immunoassay kit according to any of claims 36 to 38 wherein said reducing agent is present in at least one of the following steps:

C1 cont'd

(i) coating of said solid phase with said antigen; and

(ii) after (i), blocking said solid phase; and

(iii) after (ii), fixation of the proteins coated on said solid phase; and

(iv) after (iii), pretreatment of said solid phase.

65. (new) The method according to claim 64 wherein said reducing agent is added in step (i).

66. (new) The method according to claim 64 wherein said reducing agent is added in step (ii).

67. (new) The method according to claim 64 wherein said reducing agent is added in steps (i) and (ii).

68. (new) The method according to claim 64 wherein said reducing agent is added in step (iii).

69. (new) The method according to claim 64 wherein said reducing agent is added in steps (i) and (iii).

70. (new) The method according to claim 64 wherein said reducing agent is added in step (iv).

71. (new) The method according to claim 64 wherein said reducing agent is added in steps (i) and (iv).

72. (new) The method according to claim 64 wherein said reducing agent is DTT, DTE or TCEP.

C1 Cont'd

73. (new) The method according claim 64 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

74. (new) The immunoassay kit according to any of claims 36 to 38 which is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

75. (new) The method according to claim 64 wherein said produced immunoassay kit is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Sub. D6

76. (new) A method of detecting antibodies to an HCV, NS3 protein in a sample comprising contacting said sample with said solid phase and performing an immunoassay according to said kit.

77. (new) The method of claim 76 wherein said sample is a biological sample.--

REMARKS

Reconsideration is requested.

Claims 1-35 have been canceled, without prejudice. Claims 36-77 have been added and are pending. Support for the pending claims is found throughout the specification and no new matter has been added.